

DAYANAND ANGLO VEDIC PUBLIC SCHOOL, AIROLI.
PERIODIC TEST – II (2024-25)
SUBJECT: MATHEMATICS

STD: VII

MAX MARKS: 50
DURATION: 2 HOURS

General Instructions:

This question paper consists of 2 parts, part A and part B.

Part A consist of 2 sections.

- Section 1 contains questions 1 to 6 which are objective questions of 1 mark each.
- Section 2 (question 7) is a Case Study question containing 3 questions (2 questions of 1 mark each and 1 question of 2 marks)

Part B consists of 3 sections.

- Section 3 contains questions 8 to 13 of short answer type 1 questions of 2 marks each.
- Section 4 contains questions 14 to 19 of short answer type 2 questions of 3 marks each.
- Section 5 contains question numbers 20&21 of long answer type questions of 5 marks each.

PART A
SECTION 1

1. $\frac{-1}{9} \times \underline{\hspace{2cm}} = 1$
2. $p \div 1 = \underline{\hspace{2cm}}$.
3. Does $\frac{15}{7}$ have a terminating or a non terminating decimal?
4. Write the formula for simple interest.
5. If $x\%$ of 75 is 12, then find the value of x .
6. **ASSERTION REASON TYPE QUESTION**

Assertion: The product of $\frac{-4}{5}$ and 1 is $\frac{-4}{5}$.

Reason: One multiplied by any rational number is the rational number itself.

- (a) Both assertion and reason are correct and reason is the correct explanation for assertion.
- (b) Both assertion and reason are correct and reason is not the correct explanation for assertion.
- (c) Assertion is correct but reason is false
- (d) Assertion is false and reason is true.

SECTION 2
CASE STUDY BASED QUESTION

7. A rectangular tile has a length of $5x$ metres and a breadth of $4x$ metres. Based on this information, answer the following questions.

- (i) What type of algebraic expression is $5x$? (1 mark)
- (ii) Compute $5x \times 4x$ (1 mark)
- (iii) Evaluate the product obtained in Q7 if $x = 4$ (2 marks)

PART B
SECTION 3

8. A survey of 40 children showed that 35% liked playing tennis. How many children did not like playing tennis?

9. Express $(15^3)^{-16}$ as a single exponent of 15.

10. Convert $\frac{259}{3}$ into a decimal.

11. Simplify: $\left(\frac{7}{8}\right)^{-3} \times \left[\frac{9}{5}\right]^0 \times 8^{-2} \times \left(\frac{1}{7}\right)^{-1}$

12. Find the value of x so that $\left(\frac{-7}{11}\right)^{-3} \times \left(\frac{-7}{11}\right)^{5x} = \left(\left[\frac{-7}{11}\right]^{-2}\right)^{-1}$

13. Mr. Shergill deposited ₹15000 in the bank for his five year old daughter as he wished to give his daughter the amount of ₹ 21000 on her thirteenth birthday. At what rate of interest should the money be invested?

SECTION 4

14. Krish purchased an old house for ₹ 765000 and spent ₹ 115000 on its repairs. Then, he sold it at a gain of 5%. What was the selling price?

15. Factorise: $p^2 + qr + pr + pq$

16. Find the HCF of the terms and factorise: $8x^3y^2 + 96xy^4$

17. Simplify and express the result as a decimal: $(75.05 \div 0.05) \times 0.001 + 2.351$

18. Insert 3 rational numbers between $\frac{1}{2}$ and $-\frac{1}{2}$.

19. In what time will ₹850 fetch an interest of ₹178.50 at 6% per annum?

SECTION 5

20. Divide the sum of $\frac{5}{21}$ and $\frac{4}{7}$ by their difference.

21. If Dhiraj invested ₹ 9600 for 2 years 4 months at $7\frac{1}{2}\%$ per annum, What will be the simple interest and amount received? Will he have enough money to purchase a printer costing ₹ 12,500?